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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/789,770	02/27/2004	Paul Thomas D'Henin	04-086	1886

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EXAMINER	
KAUFFMAN, BRIAN K	

ART UNIT	PAPER NUMBER
3765	

DATE MAILED: 07/13/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/789,770	D'HENIN, PAUL THOMAS	
	Examiner	Art Unit	
	Brian K. Kauffman	3765	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *27 February 2004*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-12* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-12* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *27 February 2004* is/are: a)☐ accepted or b)☒ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date *5/25/2004*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Drawings

New corrected drawings are required in this application because the drawings are objected to under 37 CFR 1.84. In figures 1-6, the lines, numbers, and letters are not uniformly thick and well defined, clean, durable, and black. Figure 6 contains shading. Shading is not permitted. Applicant is advised to employ the services of a competent patent draftsperson outside the Office, as the U.S. Patent and Trademark Office no longer prepares new drawings. The corrected drawings are required in reply to the Office action to avoid abandonment of the application. The requirement for corrected drawings will not be held in abeyance.

Claim Objections

The claims are objected to because of the following informalities: the applicant has omitted claim 11 in the numbering of the claims. For examining purposes, claims 12 and 13 have been renumbered to become claims 11 and 12 respectively. Appropriate correction is required.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

The factual inquiries set forth in *Graham* **v.** *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claims 1-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Federal Standard 751 in view of Benstock et al. (5,003,902) in further view of Swers et al. (6,423,409).

In regard to claim 1, Federal Standard 751 discloses a method for producing a garment seam between a first garment component and a second garment component, the method comprising the steps of placing the first garment component having a first and second surface in an adjacent relationship to a second garment component having a first surface and a second surface so as to define a seam (seam type LSc-2); providing a sewing machine set up with at least two elements (stitch type 402); and sewing the first and second garment components together by using the sewing machine. Federal Standard 751 does not disclose applying sufficient heat to the stitched seam nor does Federal Standard 751 disclose using high-melt and low-melt elements in the production of the seam. Benstock et al. do disclose applying sufficient heat to the stitched seam and using high-melt and low-melt elements in the production of the seam (col. 3, lines 44-63 and col. 4, lines 34-45). Applying the heat and using threads possessing different melting points provides a durable seam (col. 4, lines 47-

49). It would have been obvious at the time the invention was made to modify the method of producing a garment seam as disclosed in Federal Standard 751 by utilizing high-melt and low-melt elements in the production of the seam and then applying sufficient heat tot the stitched seam as taught by Benstock et al. in order to produce a durable seam.

The combination of Federal Standard 751 and Benstock et al. does not require the low-melt element to be a thread. The combination instead requires utilizing a low-melt film. Swers et al. disclose a yarn comprising low-melt and a high-melt threads (col. 3, lines 16-17). Utilizing low-melt threads rather than low-melt film forms strong bonds and stabilizes and strengthens the seam (abstract). It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the combination of Federal Standard 751 and Benstock et al.'s method to utilize a low-melt thread as taught by Swers et al. in order to form a strong bond and stabilize and strengthen the seam.

In regard to claim 2, Federal Standard 751 discloses a method for producing a garment seam between a first garment component and a second garment component, the method comprising the steps of placing the first garment component having a first and second surface in an adjacent relationship to a second garment component having a first surface and a second surface so as to define a seam; reverse folding an edge portion of the first garment component over an edge portion of the second garment component along the seam wherein the first surface of the first garment component overlaps and abuts the first surface on the second garment component (seam type LSc-

2); providing a sewing machine set up with at least two elements (stitch type 402); sewing the first and second garment components together by a set stitch running along the seam; reverse folding the second garment component such that the first surface of the second garment component is folded over and abuts against the second surface of the first garment. Federal Standard 751 does not disclose applying sufficient heat to the stitched seam nor does Federal Standard 751 disclose using high-melt and low-melt elements in the production of the seam. Benstock et al. do disclose applying sufficient heat to the stitched seam and using high-melt and low-melt elements in the production of the seam (col. 3, lines 44-63 and col. 4, lines 34-45). Applying the heat and using threads possessing different melting points provides a durable seam (col. 4, lines 47-49). It would have been obvious at the time the invention was made to modify the method of producing a garment seam as disclosed in Federal Standard 751 by utilizing high-melt and low-melt elements in the production of the seam and then applying sufficient heat tot the stitched seam as taught by Benstock et al. in order to produce a durable seam.

The combination of Federal Standard 751 and Benstock et al. does not require the low-melt element to be a thread. The combination instead requires utilizing a low-melt film. Swers et al. disclose a yarn comprising low-melt and a high-melt threads (col. 3, lines 16-17). Utilizing low-melt threads rather than low-melt film forms strong bonds and stabilizes and strengthens the seam (abstract). It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the combination of Federal Standard 751 and Benstock et al.'s method to utilize a low-melt

thread as taught by Swers et al. in order to form a strong bond and stabilize and strengthen the seam.

In regard to claims 3-5 and 11-12, Swers et al. disclose that the low-melt thread is a thermoplastic composed of polypropylene with a melting point ranging from 85 degrees Celsius to 120 degrees Celsius (col. 3, lines 16-30).

In regard to claim 6, Federal Standard 751 discloses combining all the threads in at least one thread position (stitch type 402).

In regard to claims 7 and 8, Benstock et al. disclose placing the front panel of a dress shirt in an adjacent relationship to the second garment component comprising a back panel of a dress shirt such that the seam comprises a side seam of a dress shirt (fig. 2).

In regard to claim 9, Benstock et al. disclose applying pressure by ironing and pressing (col. 4, line 55-col. 5, line 11).

In regard to claim 10, Federal Standard 751 discloses a seam connecting two garment components comprising a first garment component having a first surface and a second surface; a second garment component having a first surface and a second surface; the first garment component being reverse folded along an edge of the first surface of the second garment component; a set stitch running along the seam sewing the first and second garment components together the second garment component being reverse folded around the first garment (seam type LSc-2). Federal Standard 751 does not disclose applying sufficient heat to the stitched seam nor does Federal Standard 751 disclose using high-melt and low-melt elements in the production of the

seam. Benstock et al. do disclose applying sufficient heat to the stitched seam and using high-melt and low-melt elements in the production of the seam (col. 3, lines 44-63 and col. 4, lines 34-45). Applying the heat and using threads possessing different melting points provides a durable seam (col. 4, lines 47-49). It would have been obvious at the time the invention was made to modify the method of producing a garment seam as disclosed in Federal Standard 751 by utilizing high-melt and low-melt elements in the production of the seam and then applying sufficient heat tot the stitched seam as taught by Benstock et al. in order to produce a durable seam.

The combination of Federal Standard 751 and Benstock et al. does not require the low-melt element to be a thread. The combination instead requires utilizing a low-melt film. Swers et al. disclose a yarn comprising low-melt and a high-melt threads (col. 3, lines 16-17). Utilizing low-melt threads rather than low-melt film forms strong bonds and stabilizes and strengthens the seam (abstract). It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the combination of Federal Standard 751 and Benstock et al.'s method to utilize a low-melt thread as taught by Swers et al. in order to form a strong bond and stabilize and strengthen the seam.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Kadija et al. (4,247,345) disclose a method for joining synthetic materials.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brian K. Kauffman whose telephone number is (571)272-4988. The examiner can normally be reached on M-F every week.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Calvert can be reached on (571)272-4983. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

BKK
7/6/05

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